



IFWO

## RAW SEQUENCE LISTING

DATE: 09/01/2004

PATENT APPLICATION: US/10/816,304

TIME: 12:55:37

Input Set : N:\Crf3\RULE60\10816304.raw

Output Set: N:\CRF4\09012004\J816304.raw

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1 <110> APPLICANT: Rothschild, Max
2   Emmett, Rebecca
3   Kim, Kwan
4 <120> TITLE OF INVENTION: Genetic Markers for Improved Meat Characteristics in
5   Animals
6 <130> FILE REFERENCE: ISURF 2697
7 <140> CURRENT APPLICATION NUMBER: US/10/816,304
8 <141> CURRENT FILING DATE: 2004-04-01
9 <150> PRIOR APPLICATION NUMBER: US/09/538,165
10 <151> PRIOR FILING DATE: 2000-03-30
11 <160> NUMBER OF SEQ ID NOS: 26
12 <170> SOFTWARE: PatentIn version 3.0
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 746
16 <212> TYPE: DNA
17 <213> ORGANISM: Sus scrofa
18 <400> SEQUENCE: 1
19   acaagaatct gcattcaccc atgtactttt tcatctgtag cctggctgtg gctgatatgc      60
20   tggtgagcgt ttccaatggg tcagaaacca ttgtcatcac cctattaaac agcacggaca      120
21   cggacgcaca gagtttcaca gtgaatattg ataatgtcat tgactcagtg atctgtagct      180
22   ccttactcgc ctcaatttgc agcctgcttt cgattgcagt ggacaggat tttactatct      240
23   tttatgctct ccagtaccat aacattatga cagttaagcg ggttggaaac atcatcagtt      300
24   gtatctgggc agtctgcacg gtgtcgggtg ttttgttcat catttactca gatagcagtg      360
25   ctggttattat ttgcctcata accgtgttct tcaccatgct ggctctcatg gcttctctct      420
26   atgtccacat gttcctcatg gccagactcc acattaaagag gatcgccgtc ctcccaggca      480
27   ctggcaccat ccgccaaagt gccaacatga agggggcaat taccctgacc atcttgattg      540
28   ggggtctttgt ggtctgctgg gcccccttct tctctcactt aatattctat atctcctgcc      600
29   cccagaatcc atactgtgtg tgcttcatgt ctcactttaa tttgtatctc atctgatca      660
30   tgtgtaattc catcatcrat cccctgattt atgcactccg gagccaagaa ctgaggaaaa      720
31   ccttcaaaga gatcatctgt tgctat                                     746
33 <210> SEQ ID NO: 2
34 <211> LENGTH: 840
35 <212> TYPE: DNA
36 <213> ORGANISM: Homo sapiens
37 <400> SEQUENCE: 2
38   atatcttagt gattgtggca atagccaaga acaagaatct gcattcaccc atgtactttt      60
39   tcatctgcag cttggctgtg gctgatatgc tggtgagcgt ttcaaataga tcagaaacca      120
40   ttatcatcac cctattaaac agtacagata cggatgcaca gagtttcaca gtgaatattg      180
41   ataatgtcat tgactcgggtg atctgtagct ccttgcttgc atccatttgc agcctgcttt      240
42   caattgcagt ggacaggatc tttactatct tctatgctct ccagtaccat aacattatga      300
43   cagttaagcg ggttgggatc agcataagtt gtatctgggc agcttgcacg gtttcaggca      360
44   ttttgttcat catttactca gatagtagtg ctgtcatcat ctgctctatc accatgttct      420
45   tcaccatgct ggctctcatg gcttctctct atgtccacat gttcctgatg gccaggcttc      480

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46      acattaagag gattgctgtc ctccccggca ctggtgccat ccgccaaggt gccaatatga      540
47      agggagcgat taccttgacc atcctgattg gcgtctttgt tgtctgctgg gccccattct      600
48      tcctccactt aatattctac atctcttgtc ctcagaatcc atattgtgtg tgcttcatgt      660
49      ctcaactttaa cttgtatctc atactgatca tgtgtaattc aatcatcgat cctctgattt      720
50      atgcactccg gagtcaagaa ctgaggaaaa ccttcaaaga gatcatctgt tgctatcccc      780
51      tgggaggcct ttgtgacttg tctagcagat attaaatggg gacagagcac gcaatatagg      840
53 <210> SEQ ID NO: 3
54 <211> LENGTH: 311
55 <212> TYPE: PRT
56 <213> ORGANISM: Homo sapiens
57 <220> FEATURE:
58 <221> NAME/KEY: misc_feature
59 <222> LOCATION: (298)..(298)
60 <223> OTHER INFORMATION: "Xaa" can be any amino acid
61 <400> SEQUENCE: 3
62      Gln Leu Phe Val Ser Pro Glu Val Phe Val Thr Leu Gly Val Ile Ser
63      1          5          10          15
64      Leu Leu Glu Asn Ile Leu Val Ile Val Ala Ile Ala Lys Asn Lys Asn
65      20          25          30
66      Leu His Ser Pro Met Tyr Phe Phe Ile Cys Ser Leu Ala Val Ala Asp
67      35          40          45
68      Met Leu Val Ser Val Ser Asn Gly Ser Glu Thr Ile Ile Ile Thr Leu
69      50          55          60
70      Leu Asn Ser Thr Asp Thr Asp Ala Gln Ser Phe Thr Val Asn Ile Asp
71      65          70          75          80
72      Asn Val Ile Asp Ser Val Ile Cys Ser Ser Leu Leu Ala Ser Ile Cys
73      85          90          95
74      Ser Leu Leu Ser Ile Ala Val Asp Arg Tyr Phe Thr Ile Phe Tyr Ala
75      100         105         110
76      Leu Gln Tyr His Asn Ile Met Thr Val Lys Arg Val Gly Ile Ser Ile
77      115         120         125
78      Ser Cys Ile Trp Ala Ala Cys Thr Val Ser Gly Ile Leu Phe Ile Ile
79      130         135         140
80      Tyr Ser Asp Ser Ser Ala Val Ile Ile Cys Leu Ile Thr Met Phe Phe
81      145         150         155         160
82      Thr Met Leu Ala Leu Met Ala Ser Leu Tyr Val His Met Phe Leu Met
83      165         170         175
84      Ala Arg Leu His Ile Lys Arg Ile Ala Val Leu Pro Gly Thr Gly Ala
85      180         185         190
86      Ile Arg Gln Gly Ala Asn Met Lys Gly Ala Ile Thr Leu Thr Ile Leu
87      195         200         205
88      Ile Gly Val Phe Val Val Cys Trp Ala Pro Phe Phe Leu His Leu Ile
89      210         215         220
90      Phe Tyr Ile Ser Cys Pro Gln Asn Pro Tyr Cys Val Cys Phe Met Ser
91      225         230         235         240
92      His Phe Asn Leu Tyr Leu Ile Leu Ile Met Cys Asn Ser Ile Ile Asp
93      245         250         255
94      Pro Leu Ile Tyr Ala Leu Arg Ser Gln Glu Leu Arg Lys Thr Phe Lys
95      260         265         270

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Input Set : N:\Crf3\RULE60\10816304.raw

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96      Glu Ile Ile Cys Cys Tyr Pro Leu Gly Gly Leu Cys Asp Leu Ser Ser
97          275                      280                      285
W--> 98      Arg Tyr Ala Pro Pro Glu Asn Asp Ile Xaa Val Ile Cys Asn Phe Ile
99          290                      295                      300
100      Asp Glu Asn Thr Ile Ala Leu
101          305                      310
103 <210> SEQ ID NO: 4
104 <211> LENGTH: 248
105 <212> TYPE: PRT
106 <213> ORGANISM: Homo sapiens
107 <400> SEQUENCE: 4
108      Lys Asn Leu His Ser Pro Met Tyr Phe Phe Ile Cys Ser Leu Ala Val
109          1          5          10          15
110      Ala Asp Met Leu Val Ser Val Ser Asn Gly Ser Glu Thr Ile Val Ile
111          20          25          30
112      Thr Leu Leu Asn Ser Thr Asp Thr Asp Ala Gln Ser Phe Thr Val Asn
113          35          40          45
114      Ile Asp Asn Val Ile Asp Ser Val Ile Cys Ser Ser Leu Leu Ala Ser
115          50          55          60
116      Ile Cys Ser Leu Leu Ser Ile Ala Val Asp Arg Tyr Phe Thr Ile Phe
117          65          70          75          80
118      Tyr Ala Leu Gln Tyr His Asn Ile Met Thr Val Lys Arg Val Gly Ile
119          85          90          95
120      Ile Ile Ser Cys Ile Trp Ala Val Cys Thr Val Ser Gly Val Leu Phe
121          100         105         110
122      Ile Ile Tyr Ser Asp Ser Ser Ala Val Ile Ile Cys Leu Ile Thr Val
123          115         120         125
124      Phe Phe Thr Met Leu Ala Leu Met Ala Ser Leu Tyr Val His Met Phe
125          130         135         140
126      Leu Met Ala Arg Leu His Ile Lys Arg Ile Ala Val Leu Pro Gly Thr
127          145         150         155         160
128      Gly Thr Ile Arg Gln Gly Ala Asn Met Lys Gly Ala Ile Thr Leu Thr
129          165         170         175
130      Ile Leu Ile Gly Val Phe Val Val Cys Trp Ala Pro Phe Phe Leu His
131          180         185         190
132      Leu Ile Phe Tyr Ile Ser Cys Pro Gln Asn Pro Tyr Cys Val Cys Phe
133          195         200         205
134      Met Ser His Phe Asn Leu Tyr Leu Ile Leu Ile Met Cys Asn Ser Ile
135          210         215         220
136      Ile Asn Pro Leu Ile Tyr Ala Leu Arg Ser Gln Glu Leu Arg Lys Thr
137          225         230         235         240
138      Phe Lys Glu Ile Ile Cys Cys Tyr
139          245
141 <210> SEQ ID NO: 5
142 <211> LENGTH: 20
143 <212> TYPE: DNA
144 <213> ORGANISM: Sus scrofa
145 <400> SEQUENCE: 5
146      tggcaatagc caagaacaag

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Input Set : N:\Crf3\RULE60\10816304.raw

Output Set: N:\CRF4\09012004\J816304.raw

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148 <210> SEQ ID NO: 6
149 <211> LENGTH: 20
150 <212> TYPE: DNA
151 <213> ORGANISM: Sus scrofa
152 <400> SEQUENCE: 6
153      caggggatag caacagatga                                20
155 <210> SEQ ID NO: 7
156 <211> LENGTH: 18
157 <212> TYPE: DNA
158 <213> ORGANISM: Sus scrofa
159 <400> SEQUENCE: 7
160      ttaagtggag gaagaagg                                18
162 <210> SEQ ID NO: 8
163 <211> LENGTH: 19
164 <212> TYPE: DNA
165 <213> ORGANISM: Sus scrofa
166 <400> SEQUENCE: 8
167      cattatgaca gttaagcgg                                19
169 <210> SEQ ID NO: 9
170 <211> LENGTH: 20
171 <212> TYPE: DNA
172 <213> ORGANISM: Sus scrofa
173 <400> SEQUENCE: 9
174      taccctgacc atcttgattg                                20
176 <210> SEQ ID NO: 10
177 <211> LENGTH: 22
178 <212> TYPE: DNA
179 <213> ORGANISM: Sus scrofa
180 <400> SEQUENCE: 10
181      atagcaacag atgatctctt tg                                22
183 <210> SEQ ID NO: 11
184 <211> LENGTH: 24
185 <212> TYPE: PRT
186 <213> ORGANISM: Sus scrofa
187 <400> SEQUENCE: 11
188      Met Ser His Phe Asn Leu Tyr Leu Ile Leu Ile Met Cys Asn Ser Ile
189      1          5          10          15
190      Ile Asp Pro Leu Ile Tyr Ala Leu
191          20
193 <210> SEQ ID NO: 12
194 <211> LENGTH: 24
195 <212> TYPE: PRT
196 <213> ORGANISM: Homo sapiens
197 <400> SEQUENCE: 12
198      Met Ser His Phe Asn Leu Tyr Leu Ile Leu Ile Met Cys Asn Ser Ile
199      1          5          10          15
200      Ile Asp Pro Leu Ile Tyr Ala Leu
201          20
203 <210> SEQ ID NO: 13

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Input Set : N:\Crf3\RULE60\10816304.raw

Output Set: N:\CRF4\09012004\J816304.raw

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204 <211> LENGTH: 24
205 <212> TYPE: PRT
206 <213> ORGANISM: Rattus norvegicus
207 <400> SEQUENCE: 13
208     Met Ser His Phe Asn Leu Tyr Leu Ile Leu Ile Met Cys Asn Ala Val
209         1             5             10             15
210     Ile Asp Pro Leu Ile Tyr Ala Leu
211             20
213 <210> SEQ ID NO: 14
214 <211> LENGTH: 23
215 <212> TYPE: PRT
216 <213> ORGANISM: Homo sapiens
217 <400> SEQUENCE: 14
218     Met Ser His Phe Asn Met Tyr Leu Ile Leu Ile Met Cys Asn Ser Val
219         1             5             10             15
220     Ile Asp Pro Leu Ile Tyr Ala
221             20
223 <210> SEQ ID NO: 15
224 <211> LENGTH: 23
225 <212> TYPE: PRT
226 <213> ORGANISM: Mammalia sp.
227 <400> SEQUENCE: 15
228     Met Ser His Phe Asn Met Tyr Leu Ile Leu Ile Met Cys Asn Ser Val
229         1             5             10             15
230     Ile Asp Pro Leu Ile Tyr Ala
231             20
233 <210> SEQ ID NO: 16
234 <211> LENGTH: 24
235 <212> TYPE: PRT
236 <213> ORGANISM: Homo sapiens
237 <400> SEQUENCE: 16
238     Met Ser Leu Phe Gln Val Asn Gly Val Leu Ile Met Cys Asn Ala Ile
239         1             5             10             15
240     Ile Asp Pro Phe Ile Tyr Ala Leu
241             20
243 <210> SEQ ID NO: 17
244 <211> LENGTH: 22
245 <212> TYPE: PRT
246 <213> ORGANISM: Bos taurus
247 <400> SEQUENCE: 17
248     Ala His Phe Asn Thr Tyr Leu Val Leu Ile Met Cys Asn Ser Val Ile
249         1             5             10             15
250     Asp Pro Leu Ile Tyr Ala
251             20
253 <210> SEQ ID NO: 18
254 <211> LENGTH: 22
255 <212> TYPE: PRT
256 <213> ORGANISM: Homo sapiens
257 <400> SEQUENCE: 18

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RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 09/01/2004  
PATENT APPLICATION:    US/10/816,304      TIME: 12:55:38

Input Set : N:\Crf3\RULE60\10816304.raw  
Output Set: N:\CRF4\09012004\J816304.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 298

**VERIFICATION SUMMARY**

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Input Set : N:\Crf3\RULE60\10816304.raw

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L:98 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:288